

## Bell System Technical Papers Not Published in This Journal

ALBRECHT, E. G.,<sup>5</sup> DIETZ, A. E.,<sup>1</sup> CHRISTOFERSON, E. W.,<sup>6</sup> and SLOTHOWER, J. C.<sup>6</sup>

**Co-ordinated Protection for Open-Wire Joint Use — Minneapolis Tests**, A.I.E.E. Commun. and Electronics, **24**, pp. 217–223, May, 1956.

ANDERSON, P. W.<sup>1</sup>

**Note on Ordering and Antiferromagnetism in Ferrites**, Phys. Rev., **102**, pp. 1008–1013, May 15, 1956.

ATALLA, M. M., see Preston, K., Jr.

BAKER, W. O., see Winslow, F. H.

BENSON, K. E., see Goss, A. J.

BENNETT, W. R.<sup>1</sup>

**Techniques for Measuring Noise. Part III**, Electronics, **29**, pp. 162–165, May, 1956.

BENNETT, W. R.<sup>1</sup>

**Electrical Noise, Part IV. Design of Low Noise Equipment**, Electronics, **29**, pp. 154–157, June, 1956.

BENNETT, W. R.<sup>1</sup>

**Electrical Noise. Part V. Noise Reduction in Communication Systems**, Electronics, **29**, pp. 148–151, July, 1956.

BENNETT, W. R.<sup>1</sup>

**Methods of Solving Noise Problems**, Proc. I.R.E., **44**, pp. 609–638, May, 1956.

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<sup>1</sup> Bell Telephone Laboratories Inc.

<sup>5</sup> Northwestern Bell Telephone Company.

<sup>6</sup> Northern State Power Company, Minneapolis.

BOGERT, B. P.<sup>1</sup>

**The VOBANC — A Two-to-One Bandwidth Reduction System.** J. Acous. Soc., **28**, pp. 399-404, May, 1956.

BONNEVILLE, S., see Noyes, J. W.

BOYD, R. C.<sup>1</sup>

**Objectives and General Description of the Type-P1 Carrier System,** A.I.E.E. Commun. and Electronics, **24**, pp. 188-191, May, 1956.

BOYET, H., see Weisbaum, S.

BULLARD, W. R.,<sup>4</sup> and WEPPLER, H. E.<sup>2</sup>

**Co-ordinated Protection for Open-Wire Joint Use — Present Trends,** A.I.E.E. Commun. and Electronics, **24**, pp. 215-216, May, 1956.

CHYNOWETH, A. G.<sup>1</sup>

**Surface Space Charge Layers in Barium Titanate,** Phys. Rev., **102**, pp. 705-714, May 1, 1956.

CHYNOWETH, A. G.<sup>1</sup>

**Spontaneous Polarization of Guanidine Aluminum Sulfate Hexahydrate at Low Temperatures,** Phys. Rev., **102**, pp. 1021-1023, May 15, 1956.

CHYNOWETH, A. G.<sup>1</sup> and MCKAY, K. G.<sup>1</sup>

**Photon Emission From Avalanche Breakdown in Silicon,** Phys. Rev. **102**, pp. 369-376, Apr. 15, 1956.

DIETZ, A. E., see Albrecht, E. G.

DITZENBERGER, J. A., see Fuller, C. S.

DUDLEY, H. W.<sup>1</sup>

**Fundamentals of Speech Synthesis,** J. Audio Engg. Soc., **3**, pp. 170-185, Oct., 1955.

EBERHART, E. K.,<sup>1</sup> HALLENBECK, F. J.,<sup>1</sup> AND PERKINS, E. H.<sup>1</sup>

**Circuit and Equipment Descriptions of Type-P1 Carrier System,** A.I.E.E. Commun. and Electronics, **24**, pp. 195-204, May, 1956.

<sup>1</sup> Bell Telephone Laboratories Inc.

<sup>2</sup> American Telephone and Telegraph Company, Inc.

<sup>4</sup> Ebasco Services, Inc., New York.

ELLIS, H. M.,<sup>7</sup> PHELPS, J. W.,<sup>1</sup> ROACH, C. L.,<sup>8</sup> and TREEN, R. E.<sup>7</sup>

**Co-ordinated Protection for Open-Wire Joint Use — Ontario Tests,** A.I.E.E. Commun. and Electronics, **24**, pp. 223–236, May, 1956.

FULLER, C. S.,<sup>1</sup> and DITZENBERGER, J. A.<sup>1</sup>

**Diffusion of Donor and Acceptor Elements in Silicon,** J. Appl. Phys., **27**, pp. 544–553, May, 1956.

FULLER, C. S.<sup>1</sup>

**Some Analogies Between Semiconductors and Electrolyte Solutions,** Record of Chem. Progress, **17**, pp. 75–93, No. 2, 1956.

GARRETT, C. C. B., see Law, J. T.

GASTON, C. M.<sup>1</sup>

**Stop Playing Hide-and-Seek with Engineering Drawings,** Iron Age Magazine, **177**, pp. 100–101, May 17, 1956.

GAUDET, S., see Noyes, J. W.

GELLER, S.<sup>1</sup>

**The Crystal Structure of Gadolinium Orthoferrite,  $GdFeO_3$ ,** J. Chem. Phys., **24**, pp. 1236–1239, June, 1956.

GILLES, M. A.<sup>1</sup>

**Magnetic Properties of a Gadolinium Orthoferrite,  $GdFeO_3$  Crystal,** J. Chem. Phys., **24**, pp. 1239–1243, June, 1956.

GILLOTH, P. K.<sup>1</sup>

**A Simulator for Analysis of Sampled Data Control Systems,** Proc. Natl. Simulation Conf., pp. 21.1–21.8, Jan., 1956.

GOSS, A. J.,<sup>1</sup> BENSON, K. E.,<sup>1</sup> and PEANN, W. G.<sup>1</sup>

**Dislocations at Compositional Fluctuations in Germanium-Silicon Alloys,** Acta Met., Letter to the Editor, **4**, pp. 332–333, May, 1956.

HALLENBECK, F. J., see Eberhart, E. K.

HARROWER, G. A.<sup>1</sup>

**Auger Electron Emission in the Energy Spectra of Secondary Electrons from Mo and W.,** Phys. Rev., **102**, pp. 340–347, Apr. 15, 1956.

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<sup>7</sup> Hydro-Electric Power Commission of Ontario, Toronto, Ont., Canada.

<sup>8</sup> Bell Telephone Company of Canada, Montreal, Que., Canada.

HARROWER, G. A.<sup>1</sup>

**Dependence of Electron Reflection on Contamination of the Reflecting Surface**, *Phys. Rev.*, **102**, pp. 1288-1289, June 1, 1956.

HOWARD, J. D., JR.<sup>2</sup>

**Application of the Type-P1 Carrier System to Rural Telephone Lines**, *A.I.E.E. Commun. and Electronics*, **24**, pp. 205-214, May, 1956.

HUTSON, A. R.<sup>1</sup>

**Effect of Water Vapor on Germanium Surface Potential**, *Phys. Rev.*, **102**, pp. 381-385, Apr. 15, 1956.

KATZ, D.<sup>1</sup>

**A Magnetic Amplifier Switching Matrix**, *A.I.E.E. Commun. and Electronics*, **24**, pp. 236-241, May, 1956.

KOWALCHIK, M., see Trumbore, F. A.

LAW, J. T.,<sup>1</sup> and GARRETT, C. G. B.<sup>1</sup>

**Measurements of Surface Electrical Properties of Bombardment-Cleaned Germanium**, *J. Appl. Phys.*, **27**, p. 656, June, 1956.

LEWIS, H. W.<sup>1</sup>

**Two-Fluid Model of an "Energy-Gap" Superconductor**, *Phys. Rev.*, **102**, pp. 1508-1511, June 15, 1956.

LOGAN, R. A., see Thurmond, C. D.

LOZIER, J. C.<sup>1</sup>

**A Study State Approach to the Theory of Saturable Servo Systems**, *I.R.E. Trans., PGAC*, **1**, pp. 19-39, 1956.

LUNDBERG, J. L.,<sup>1</sup> and ZIMM, B. H.<sup>9</sup>

**Sorption of Vapors by High Polymers**, *J. Phys. Chem.*, **60**, pp. 425-428, Apr. 16, 1956.

MATTHIAS, B. T.,<sup>1</sup> and REMEIK, J. P.<sup>1</sup>

**Ferroelectricity in Ammonium Sulfate**, *Phys. Rev., Letter to the Editor*, **103**, p. 262, July 1, 1956.

<sup>1</sup> Bell Telephone Laboratories Inc.

<sup>2</sup> American Telephone and Telegraph Company, Inc.

<sup>9</sup> General Electrical Research Laboratories.

McKAY, K. G., see Chynoweth, A. G.

McLEAN, D. A.<sup>1</sup>

**Tantalum Solid Electrolytic Capacitors**, Proc. Natl. Conf. Aeronautical Electronics, pp. 289-294, May, 1956.

McSKIMIN, H. J.<sup>1</sup>

**Propagation of Longitudinal Waves and Shear Waves in Cylindrical Rods at High Frequencies**, J. Acous. Soc., **28**, pp. 484-494, May, 1956.

NOYES, J. W.,<sup>8</sup> GAUDET, G.,<sup>8</sup> and BONNEVILLE, S.<sup>8</sup>

**Development of Communications in Canada**, Elec. Engg., **75**, p. 539, June, 1956.

O'BRIEN, J. A.<sup>1</sup>

**Cyclic Decimal Codes for Analogue to Digital Converters**, A.I.E.E. Commun. and Electronics, **24**, pp. 120-122, May, 1956.

OWENS, C. D.<sup>1</sup>

**Stability Characteristics of Molybdenum Permalloy Powder Cores**, Elec. Engg., **75**, pp. 252-256, Mar., 1956.

PEARSON, G. L.<sup>1</sup>

**Electricity from the Sun**, Proc. World Symp. Appl. Solar Energy, pp. 281-288, Book.

PERKINS, E. H., see Eberhart, E. K.

PFANN, W. G.<sup>1</sup>

**Zone Melting: A Fresh Outlook for Fractional Crystallization**, Chem. & Engg. News, **34**, pp. 1440-1443, Mar. 26, 1956.

PFANN, W. G., see Goss, A. J.

PHIELPS, J. W.<sup>1</sup>

**Protection Problems in Telephone Distribution Systems**, Wire and Wire Products, **31**, pp. 555-596, May, 1956.

PHIELPS, J. W., see Ellis, H. M.

<sup>1</sup> Bell Telephone Laboratories Inc.

<sup>8</sup> Bell Telephone Company of Canada, Montreal, Que., Canada.

PIERCE, J. R.<sup>1</sup>

**Physical Sources of Noise**, *Pro. I.R.E.*, **44**, pp. 601-608, May, 1956.

POMEROY, A. F.,<sup>1</sup> and SUAREZ, E. M.<sup>1</sup>

**Determining Attenuation of Waveguide From Electrical Measurements on Short Samples**, *I.R.E. Trans. MTT-4*, pp. 122-129, Apr., 1956.

PONDY, P. R.<sup>1</sup>

**Dust-Lint Control in Tube Fabrication**, *Electronics*, **29**, pp. 246-250, June, 1956.

PNESTON, K., JR.<sup>1</sup> and ATALLA, M. M.<sup>1</sup>

**Transient Temperature Rise in Semi-Infinite Solid Due to a Uniform Disc Source**, *J. Appl. Mechanics*, **23**, p. 313, June, 1956.

PRINCE, E.<sup>1</sup>

**Neutron Diffraction Observation of Heat Treatment in Cobalt Ferrite**, *Phys. Rev.*, **102**, pp. 674-676, May 1, 1956.

REMEIKA, J. P., see Matthias, B. T.

REISS, H.<sup>1</sup>

**p-n Junction Theory by the Method of Functions**, *J. Appl. Phys.*, **27**, pp. 530-537, May, 1956.

RICE, S. O.<sup>1</sup>

**A First Look at Random Noise**, *A.I.E.E. Commun. and Electronics*, **24**, pp. 128-131, May, 1956.

SMITH, D. H.<sup>1</sup>

**Power Supplies for the Type-PI Carrier System**, *A.I.E.E. Commun. and Electronics*, **24**, pp. 191-195, May, 1956.

SUAREZ, E. M., see Pomeroy, A. F.

THEUERER, H. C.<sup>1</sup>

**Purification of Germanium Tetrachloride by Extraction with Hydrochloric Acid and Chlorine**, *J. of Metals*, **8**, pp. 688-690, May, 1956.

---

<sup>1</sup> Bell Telephone Laboratories Inc.

THURMOND, C. D.,<sup>1</sup> and LOGAN, R. A.<sup>1</sup>

**The Distribution of Copper Between Germanium and Ternary Melts Saturated with Germanium**, J. Phys. Chem., **60**, pp. 591-594, May, 1956.

THURMOND, C. D., see Trumbore, F. A.

TRUMBORE, F. A.,<sup>1</sup> THURMOND, C. D.,<sup>1</sup> and KOWALCHIK, M.<sup>1</sup>

**The Germanium-Oxygen System**, J. Chem. Phys., Letter to the Editor, **24**, p. 1112, May, 1956.

WEISBAUM, S.<sup>1</sup> and BOYET, H.<sup>1</sup>

**Broadbank Non-Reciprocal Phase Shifts — Analysis of Two Ferrite Slabs in Rectangular Guide**, J. Appl. Phys., **27**, pp. 519-524, May, 1956.

WEPPLER, H. E., see Bullard, W. R.

WINSLOW, F. H.,<sup>1</sup> BAKER, W. O.,<sup>1</sup> and YAGER, W. A.<sup>1</sup>

**The Structure and Properties of Some Pyrolyzed Polymers**, Proc. Conf. on Carbon, pp. 93-102, 1956.

WOOD, E. A. MRS. <sup>1</sup>

**The Question of a Phase Transition in Silicon**, J. Phys. Chem., **60**, pp. 508-509, Apr., 1956.

YAGER, W. A., see Winslow, F. H.

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<sup>1</sup> Bell Telephone Laboratories Inc.